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(FILE 'HOME' ENTERED AT 14:48:47 ON 26 JUN 2006)

FILE 'CAPLUS, MEDLINE, BIOSIS' ENTERED AT 14:49:05 ON 26 JUN 2006

L1	8137 S AMIDE (1W) BOND
L2	1303 S PEGYLATION
L3	60709 S N (1W) TERMINUS
L4	0 S L1 (L) L2 (L) L3
L5	9 S L1 (L) L2
L6	4 DUP REM L5 (5 DUPLICATES REMOVED)
L7	1 S L6 AND TERMINUS

=> d 16 1-4 ti au py so kwic

- L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1  
TI Long-acting interferon- $\alpha$  2a modified with a trimer-structured  
polyethylene glycol: Preparation, in vitro bioactivity, in vivo stability  
and pharmacokinetics  
AU Jo, Yeong Woo; Youn, Yu Seok; Lee, Sung Hee; Kim, Byong Moon; Kang, Soo  
Hyung; Yoo, Moohi; Choi, Eung Chil; Lee, Kang Choon  
PY 2006  
SO International Journal of Pharmaceutics (2006), 309(1-2), 87-93  
CODEN: IJPHDE; ISSN: 0378-5173  
AB The proper selection of size and shape for polyethylene glycol (PEG) is  
one of the most important points in **PEGylation** technol.  
Therefore, PEGs of various sizes and shapes have been widely developed to  
endow specific properties. In this study, a unique, trimer-structured, 43  
kDa PEG was conjugated to interferon- $\alpha$  2a (IFN) by forming an  
**amide bond** to improve the pharmacokinetic properties and  
minimize the loss of IFN bioactivity. Mono-PEGylated IFN (PEG3-IFN)  
prepared by utilizing this unique. . .
- L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2  
TI Effects of PEG conjugation on insulin properties  
AU Hinds, Kenneth D.; Kim, Sung Wan  
PY 2002  
SO Advanced Drug Delivery Reviews (2002), 54(4), 505-530  
CODEN: ADDREP; ISSN: 0169-409X  
AB . . . low-mol.-weight monomethoxypoly(ethylene glycol) (mPEG) were chemical  
coupled to insulin via its amino groups at positions phenylalanine-B1 or  
lysine-B29, with an **amide bond** being formed between  
the polymer and protein. The site-specific attachment of mPEG to insulin  
did not substantially alter insulin's secondary/tertiary. . .  
structure, self-association behavior, or potency in vivo. However, mPEG  
attachment did significantly enhance insulin's resistance to aggregation.  
In addition, the **pegylation** of insulin almost completely eliminates  
the resultant conjugate's immunogenicity, allergenicity, and antigenicity.  
Finally, the conjugates were observed to remain in. . .
- L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3  
TI New PEGs for peptide and protein modification, suitable for identification  
of the PEGylation site  
AU Veronese, F. M.; Sacca, B.; de Laureto, P. Polverino; Sergi, M.; Caliceti,  
P.; Schiavon, O.; Orsolini, P.  
PY 2001  
SO Bioconjugate Chemistry (2001), 12(1), 62-70  
CODEN: BCCHES; ISSN: 1043-1802  
AB . . . arm, Met-Nle or Met- $\beta$ Ala, activated as succinimidyl ester.  
PEG-Met-Nle-OSu or PEG-Met- $\beta$ Ala-OSu react with amino groups in  
protein-yielding conjugates with stable **amide bond**.  
From these conjugates PEG may be removed by BrCN treatment, leaving Nle or  
 $\beta$ Ala as reporter amino acid, at the. . . sequence of glucagone and  
on lysozyme as model peptide or protein. Furthermore, insulin, a protein  
with three potential sites of **PEGylation**, was modified by  
PEG-Met-Nle, and the PEG isomers were separated by HPLC. After removal of  
PEG, as reported above, the sites of **PEGylation** were identified  
by characterization of the two insulin chains obtained after reduction and  
carboxymethylation. Mass spectrometry, amino acid anal. and. . .
- L6 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Domain ligation strategy employing weak base reaction with aldehyde to  
prepare macromolecular conjugates  
IN Tam, James P.  
PY 1995  
1996  
1995  
SO PCT Int. Appl., 96 pp.  
CODEN: PIXXD2  
AB . . . is highly specific and may undergo a subsequent intramol. O to  
N-acyl rearrangement step which results in the formation of **amide**

bond. Weak bases on a peptide segment are those that contain 1,2- or 1,3-amino thiol or alc. or those that contain. . . a method using the same concept of weak base-aldehyde ligation for site-specific modification of peptides or proteins by lipidation and **pegylation**. More particularly, the invention relates to the modification of the protein gp120 derived from the human immunodeficiency virus-1 at the . chains (lipidation) to increase its efficacy as a vaccine and the modification of the cytokine interleukin-2 by polyethylene glycol (PEG, **pegylation**) to increase its stability.